



## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

**In Re Application of:****Vicente R. Tur et al.****Application No.: 10/581,856****Filing Date: December 6, 2004****For: IMPROVED CYTOKINE DESIGN****Confirmation No.: 4628****Group Art Unit: Not Yet Assigned****Examiner: Not Yet Assigned**

DATE OF DEPOSIT: May 29, 2007

I HEREBY CERTIFY THAT THIS PAPER IS BEING DEPOSITED WITH THE UNITED STATES POSTAL SERVICE AS FIRST CLASS MAIL, POSTAGE PREPAID, ON THE DATE INDICATED ABOVE AND IS ADDRESSED TO THE UNITED STATES PATENT AND TRADEMARK OFFICE, P.O. BOX 1450, ALEXANDRIA, VA 22313-1450.

A handwritten signature in black ink, appearing to read "Andrew T. Serafini".

TYPED NAME: Andrew T. Serafini  
REGISTRATION NO.: 41,303

Mail Stop Amendment  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

**INFORMATION DISCLOSURE STATEMENT**

Pursuant to 37 CFR § 1.56 and in accordance with 37 CFR §§ 1.97-1.98, information relating to the above-identified application is hereby disclosed. Inclusion of information in this statement is not to be construed as an admission that this information is material as that term is defined in 37 CFR § 1.56(b).

- In accordance with § 1.97(b), since this Information Disclosure Statement is being filed either within three months of the filing date of the above-identified application, within three months of the date of entry into the national stage of

the above identified application as set forth in § 1.491, before the mailing date of a first Office Action on the merits of the above-identified application, or before the mailing date of a first Office Action after the filing of request for continued examination under § 1.114, no additional fee is required.

- In accordance with § 1.97(c), this Information Disclosure Statement is being filed after the period set forth in § 1.97(b) above but before the mailing date of either a Final Action under § 1.116 or a Notice of Allowance under § 1.311, or before an action that otherwise closes prosecution in the application, therefore:
  - Certification in Accordance with § 1.97(e) is attached; or
  - The fee of \$180.00 as set forth in § 1.17(p) is attached.
- In accordance with § 1.97(d), this Information Disclosure Statement is being filed after the mailing date of either a Final Action under § 1.113 or a Notice of Allowance under § 1.311 but before, or simultaneously with, the payment of the Issue Fee, therefore included are: Certification in Accordance with § 1.97(e); and the submission fee of \$180.00 as set forth in § 1.17(p).
- Copies of reference numbers 1 - 17 listed on the attached Form PTO-1449 are enclosed herewith.
- Copies of reference numbers - on the attached Form PTO 1449 are not required to be submitted pursuant to 37 CFR § 1.98(a)(2)(i).
- Copies of references - are not being submitted because they were previously cited by or submitted to the U.S. Patent and Trademark Office in patent application number , filed for which a claim for priority under 35 U.S.C. § 120 has been made in the instant application.

- The relevance of those listed references which are not in the English language is as follows:

There are no listed references which are not in the English language.

Please charge any deficiency or credit any overpayment to Deposit Account No. 23-3050. This form is submitted in duplicate.

Date: May 29, 2007

  
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**Form PTO-1449 Modified**

List of Patent and Publications  
Cited by Applicant  
(Use several sheets if necessary)

U.S. Department of Commerce  
Patent and Trademark Office

Docket No.  
CARP-0124

Application No.  
10/581,856

Applicant  
Vicente R. Tur et al.

Filing Date  
December 6, 2004

Group  
Not Yet Assigned

Confirmation No.  
4628

**FOREIGN PATENT DOCUMENTS**

Examiner Initial		Document No.	Date	Country	Translation	
					YES	NO
	1	88/06625	09/07/88	WO		
	2	99/36535	07/22/99	WO		
	3	01/00832	01/04/01	WO		
	4	03/29420	04/10/03	WO		
	5	04/01009	12/31/03	WO		

<b>EXAMINER</b>	<b>DATE CONSIDERED</b>
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<b>Form PTO-1449 Modified</b>	Docket No. CARP-0124	Application No. 10/581,856
List of Patent and Publications Cited by Applicant (Use several sheets if necessary)	Applicant Vicente R. Tur et al.	
U.S. Department of Commerce Patent and Trademark Office	Filing Date December 6, 2004	Group Not Yet Assigned
	Confirmation No. 4628	

**NON-PATENT DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)**

6	Cha, SS et al., "2.8 Å Resolution Crystal Structure of Human TRAIL, a Cytokine with Selective Antitumor Activity," <i>Immunity</i> , <b>1999</b> , 11(2), 253-261
7	Degli-Esposti et al., "Cloning and Characterization of TRAIL-R3, a Novel Member of the Emerging TRAIL Receptor Family," <i>J. Exp. Med.</i> , <b>1997</b> , 186(7), 1165-1170
8	Eck, MJ et al., "The Structure of Human Lymphotoxin (Tumor Necrosis Factor-β) at 1.9-Å Resolution," <i>J. Biol. Chem.</i> , <b>1992</b> , 267(4), 2119-2122
9	Filikov et al., "Computational stabilization of human growth hormone," <i>Protein Sci.</i> , <b>2002</b> , 11, 1452-1461
10	Hymowitz, S.G. et al., "A Unique Zinc-Binding Site Revealed by a High-Resolution X-ray Structure of Homotrimeric Apo2L/TRAIL," <i>Biochemistry</i> , <b>2000</b> , 39(4), 633-640
11	Hymowitz, SG et al., "Triggering Cell Death: The Crystal Structure of Apo2L/TRAIL in a Complex with Death Receptor 5," <i>Mol. Cell.</i> , <b>1999</b> , 4(4), 563-571
12	Kelley, R.F. et al., "Receptor-selective mutants of Apo2L/TRAIL reveal a greater contribution of DR5 and DR4 to apoptosis signaling," e-published ahead of print November 1, <b>2004</b> , Manuscript #M410660200v1, 1-41
13	Luo et al., "Development of a cytokine analog with enhanced stability using computational ultrahigh throughput screening," <i>Protein Sci.</i> , <b>2002</b> , 11, 1218-1226
14	Mongkolsapaya, J. et al., "Structure of the TRAIL-DR5 complex reveals mechanisms conferring specificity in apoptotic initiation," <i>Nat. Struct. Biol.</i> , <b>1999</b> , 6(11), 1048-1053
15	Screaton et al., "TRICK2, a new alternatively spliced receptor that transduces the cytotoxic signal from TRAIL," <i>Curr. Biol.</i> , <b>1997</b> , 7(9), 693-696
16	Shanafelt, A.B. et al., "An immune cell-selective interleukin 4 agonist," <i>PNAS</i> , <b>1998</b> , 95(16), 9454-9458
17	Van der Sloot, A. et al., "Stabilization of TRAIL, an all-β-sheet multimeric protein, using computational redesign," <i>Protein Engineering, Design &amp; Selection</i> , <b>2004</b> , 17(9), 673-680

<b>EXAMINER</b>	<b>DATE CONSIDERED</b>
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